AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Withdrawn, Previously Presented) A polycrystalline semiconductor thin film substrate comprising an insulative substrate and a polycrystalline semiconductor thin film formed on one surface of the insulative substrate, wherein the polycrystalline semiconductor thin film is formed by a plurality of laser irradiation steps, wherein the laser irradiation steps are carried out so that, after the last laser irradiation step, the number of crystal grains with the number of closest crystal grains of 6 is greatest among plural crystal grains that form the polycrystalline semiconductor thin film.

2. (Withdrawn, Original) A polycrystalline semiconductor thin film substrate as defined in claim 1, wherein the roughness of the grain boundaries on the surface of the polycrystalline semiconductor thin film is 5 nm or less.

3. (Previously Presented) A semiconductor device comprising plural transistors formed in a polycrystalline semiconductor thin film, wherein the polycrystalline semiconductor thin film is formed by a plurality of laser irradiation steps, wherein the laser irradiation steps are carried out so that, after the last laser irradiation step, the number of crystal grains with the number of closest crystal grains of 6 is greatest among plural crystal grains that form the polycrystalline semiconductor thin film.

4. (Original) A semiconductor device as defined in claim 3, wherein the roughness of the grain boundaries on the surface of the polycrystalline semiconductor thin film is 5 nm or less.

5. (Withdrawn, Previously Presented) A semiconductor device comprising plural transistors formed in a polycrystalline semiconductor thin film, wherein the polycrystalline semiconductor thin film is formed by a plurality of laser irradiation steps, wherein the laser irradiation steps are carried out so that, after the last laser irradiation step, within a square region with a 10 μ side, 50 to 100% of the crystal grains have the number of closest crystalline grains of 6 and are present in an area including the center of the polycrystalline semiconductor thin film.

6. (Withdrawn, Original) A semiconductor device as defined in claim 5, wherein the roughness of the grain boundaries on the surface of the polycrystalline semiconductor thin film is 5 nm or less.

7. (Canceled)

8. (Withdrawn, Previously Presented) An electronic apparatus comprising a semiconductor device in which plural transistors are formed in a polycrystalline semiconductor thin film, wherein variation in the threshold voltage of the plural transistors is 0.1 V or less, wherein the polycrystalline semiconductor thin film is formed by a plurality of laser irradiation steps, wherein the laser irradiation steps are

carried out so that, after the last laser irradiation step, the number of crystal grains with the number of closest crystal grain of 6 is greatest among plural crystal grains that form the polycrystalline semiconductor thin film.

9. (Withdrawn, Original) An electronic apparatus as defined in claim 8, wherein the roughness of the grain boundaries on the surface of the polycrystalline semiconductor thin film is 5 nm or less.

10. (Withdrawn, Previously Presented) An electronic apparatus comprising a semiconductor device in which plural transistors are formed in a polycrystalline semiconductor thin film, wherein the polycrystalline semiconductor thin film is formed by a plurality of laser irradiation steps, wherein the laser irradiation steps are carried out so that, after the last laser irradiation step, within a square region with a 10 μm side, 50 to 100% of the crystal grains have the number of closest crystalline grains of 6 and are present in an area which includes the center of the polycrystalline semiconductor thin film.

11. (Withdrawn, Original) An electronic apparatus as defined in claim 10, wherein the roughness of the grain boundaries on the surface of the polycrystalline semiconductor thin film is 5 nm or less.

12. (Withdrawn, Previously Presented) An electronic apparatus as defined in claim 8, wherein the electronic apparatus is a liquid crystal display, the semiconductor device has transistors for operating each of pixels of a liquid crystal

display panel and transistors constituting peripheral driver circuits and is stacked and attached on the liquid crystal display panel of the liquid crystal display.

13. (Withdrawn, Previously Presented) An electronic apparatus as defined in claim 8, wherein at least one of a central processing unit, a cache circuit, a memory circuit, a peripheral circuit, an input/output circuit and a bus circuitry are formed with the transistors of the semiconductor device.

14 – 15. (Cancelled)

16. (Withdrawn, Previously Presented) A semiconductor device in which a transistor is formed in a polycrystalline semiconductor thin film, wherein the polycrystalline semiconductor thin film is formed by a plurality of laser irradiation steps, wherein the laser irradiation steps are carried out so that, after the last laser irradiation step, the number of crystal grains with the number of closest crystal grains of 6 is greatest among plural crystal grains forming the channel region of the transistor.

17.-20. (Cancelled)

21. (New) A semiconductor device comprising plural transistors formed in a polycrystalline semiconductor thin film, wherein the polycrystalline semiconductor thin film is formed by a plurality of laser irradiation steps, wherein the laser irradiation steps are carried out so that, after the last laser irradiation step, the number of

crystal grains with the number of closest crystal grains of 6 is greatest among plural and non-uniformly oriented crystal grains that form the polycrystalline semiconductor thin film.

22. (New) A semiconductor device a defined in claim 21, the roughness of the grain boundaries on the surface of the polycrystalline semiconductor thin film is 5 nm or less.

23. (New) A semiconductor device as claimed in claim 21, wherein the crystalline orientations are independent of the shape of crystalline surfaces of the plural crystal grains that form the polycrystalline semiconductor thin film.

24. (New) A semiconductor device as claimed in claim 3, wherein the plural crystal grains that form the polycrystalline semiconductor thin film have crystalline orientations independent of the crystalline surface shapes.